

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
24 July 2003 (24.07.2003)

PCT

(10) International Publication Number  
**WO 03/059168 A1**

(51) International Patent Classification<sup>7</sup>: **A61B 8/00,**  
A61N 7/02

(21) International Application Number: PCT/SE03/00045

(22) International Filing Date: 15 January 2003 (15.01.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0200090-9 15 January 2002 (15.01.2002) SE

(71) Applicant (for all designated States except US): **ULTRA-  
ZONIX DNT AB** [SE/SE]; Krossverksgatan 3, S-216 16  
Malmö (SE).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- of inventorship (Rule 4.17(iv)) for US only

(72) Inventor; and  
(75) Inventor/Applicant (for US only): **LIDGREN, Lars** [SE/SE]; Örnvägen 35, S-227 31 Lund (SE).

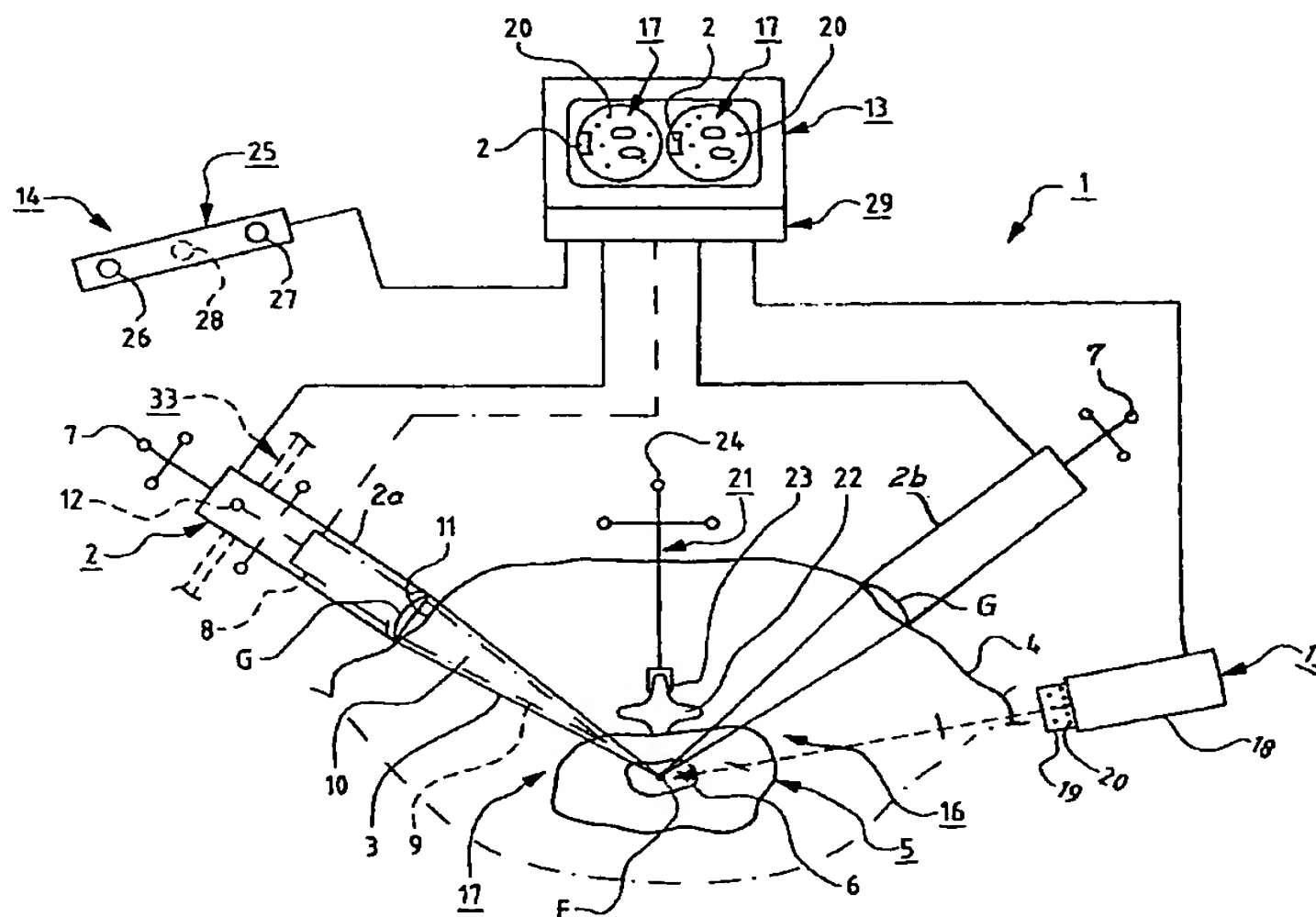
(74) Agents: **ÅKERMAN, Mårten** et al.; Albihs Malmö AB, P.O. Box 4289, S-203 14 Malmö (SE).

**Published:**

- with international search report

[Continued on next page]

(54) Title: **DEVICE FOR NON-INVASIVE ULTRASOUND TREATMENT OF AN OBJECT**



(57) **Abstract:** The present invention relates to a device for non-invasive ultrasound treatment of an object (5) of a patient, wherein at least two therapeutic ultrasound transducers (2a, 2b) are arranged for treatment of the object (5) by generating at least one ultrasonic field (3), the temperature focus (F) of which can be located in the object (5). A diagnostic ultrasound transducer (8) is arranged to determine the acoustic properties of the patient's (4) tissue (10) between the area on which the therapeutic ultrasound transducers (2a, 2b) are to be located during treatment and the object (5) in order to, in dependence of the acoustic properties determined by the diagnostic ultrasound transducer (8), set the therapeutic ultrasound transducers (2a, 2b) relative to the object (5).